

Factors affecting estimation of the maximum aerobic capacity by treadmill test in students of medical emergencies in Qazvin

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★Abstract

Background: The maximum aerobic capacity (VO_{2max}) can be used to evaluate the cardio-pulmonary condition and to provide physiological balance between a person and his job.

Objectives: The aim of this study was to estimate the maximum aerobic capacity and its associated factors among students of medical emergencies in Qazvin.

Methods: This cross-sectional study was conducted in 36 male students of medical emergencies in Qazvin University of Medical Sciences, 2015. The Physical Activity Readiness Questionnaire (PAR-Q) and demographic questionnaire were completed by the participants. The participants meeting the inclusion criteria were assessed using the Gerkin treadmill protocol. Data were analyzed using Mann-Whitney U test and Kruskal-Wallis.

Findings: Mean maximum aerobic capacity was 1.94 ± 0.27 L/min. The maximum aerobic capacity was associated with weight and height groups. There was significant positive correlation between maximal aerobic capacity and height, weight and body mass index.

Conclusion: The Gerkin treadmill test is useful for estimation of the maximum aerobic capacity and the maximum working ability in students of medical emergencies.

Keywords: Oxygen Consumption, Emergency Responders, Exercise Test

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